

# Coronary Heart Disease

## Disease Information Packets – Slide Sets



Public Health Services,  
Community Health Statistics

8/2010

# What is Coronary Heart Disease?

- Coronary heart disease (CHD) is the most common heart condition under the broad description of *heart disease* in the United States.
- Caused by *atherosclerosis* – narrowing of the small blood vessels that supply blood and oxygen to the heart due to plaque (fatty deposits).
  - Impaired blood flow can cause death of the heart muscle from lack of oxygen.
- CHD can also cause:
  - Heart Attack
  - Heart Arrhythmia (irregular heartbeat)
  - Heart Failure
  - Sudden Cardiac Death



# Demographic Risk Factors

- Age
  - About 82% of people who die from CHD are 65 or older. (AHA)
- Gender
  - Men are more likely than women to have CHD.
- Heredity/Genetic factors
  - Risk of CHD increases 2-3 times if a close relative has the disease. (Scheuner, 2006)
- Race/ethnicity
  - Blacks and Hispanics are at a higher risk for developing CHD than Whites.
- Socio-economic Status
  - Those of low socio-economic status are at a higher risk for developing CHD than those of high socio-economic status.

# Behavioral and Social Risk Factors

- High blood pressure
  - B.P.  $\geq$  140 mmHg/90 mmHg increases the risk of CHD.
- High blood cholesterol
  - In 2007, about 37 million American adults had high cholesterol.
- Diabetes Mellitus
  - At least 65% of people with diabetes die from heart or blood vessel disease.



# Behavioral and Social Risk Factors

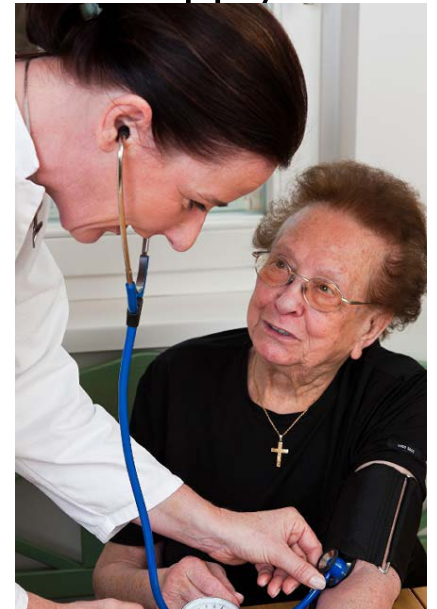
- Sedentary lifestyle / Obesity
  - Obesity is a major risk factor for CHD. (AHA)
  - About 66% of Americans over the age of 20 were overweight or obese in 2007. (AHA)
- Tobacco use
  - Smoking cigarettes contributes to the development of atherosclerosis. (Surgeon General)
  - The risks of CHD and sudden cardiac death are higher among smokers than non-smokers. (Surgeon General)
- Poor nutrition
- Poor medical care
- Stress, depression





# Intermediate Outcomes

- Stroke
  - A diseased heart increases the risk of stroke.
- Angina pectoris
  - Causes chest pain or discomfort from reduced blood supply to the heart.
- High blood pressure
- High cholesterol
- Diabetes



# National Statistics

- Nearly 4 out of 10 of American adults (18 years and older) had two or more risk factors for CHD in 2003. (Hayes, 2003)
- Each year over 1 million Americans suffer a heart attack and about half of them die as a result of the attack. (AHA)
- CHD was listed first in as the reason for 1,981,000 hospital discharges in 2004. (DHDSP)

# National Disparities

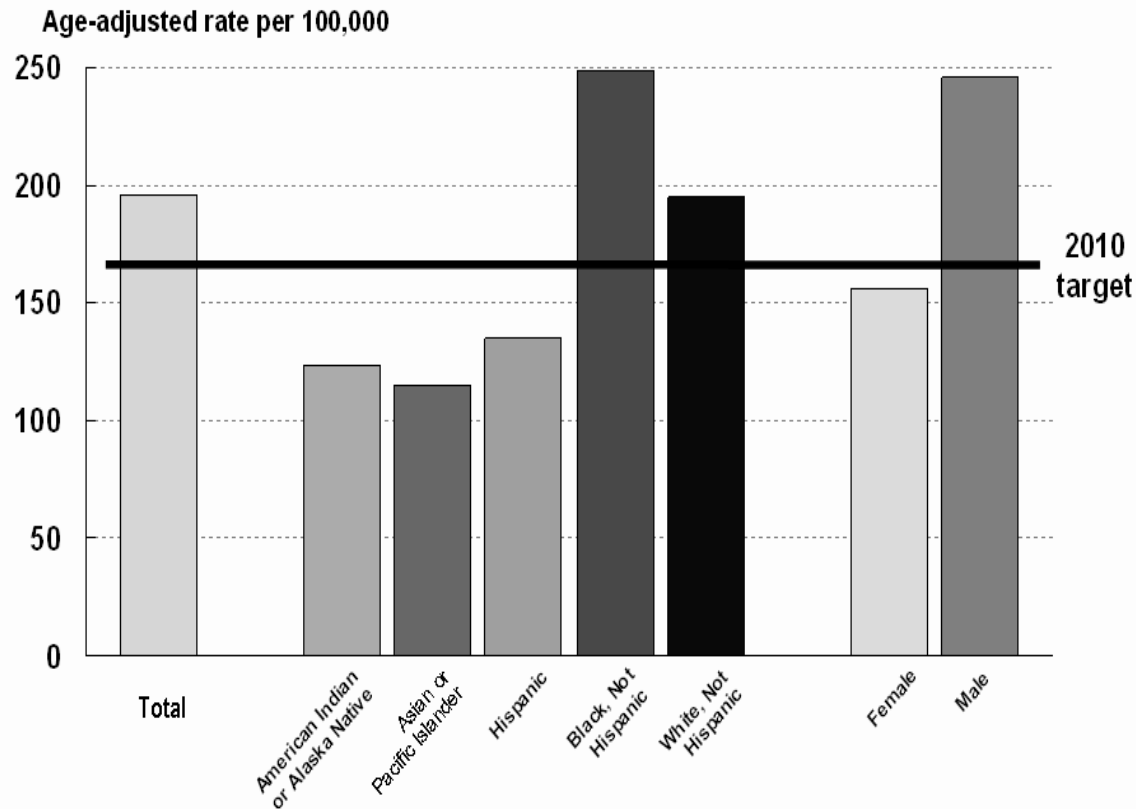
- Across the United States, death rates due to heart disease in 2006 were highest in Mississippi and lowest in Minnesota.

## Top 5 States with Highest Heart Disease Death Rates, United States, 2000-2006

1. Mississippi
2. Oklahoma
3. Alabama
4. West Virginia
5. Kentucky



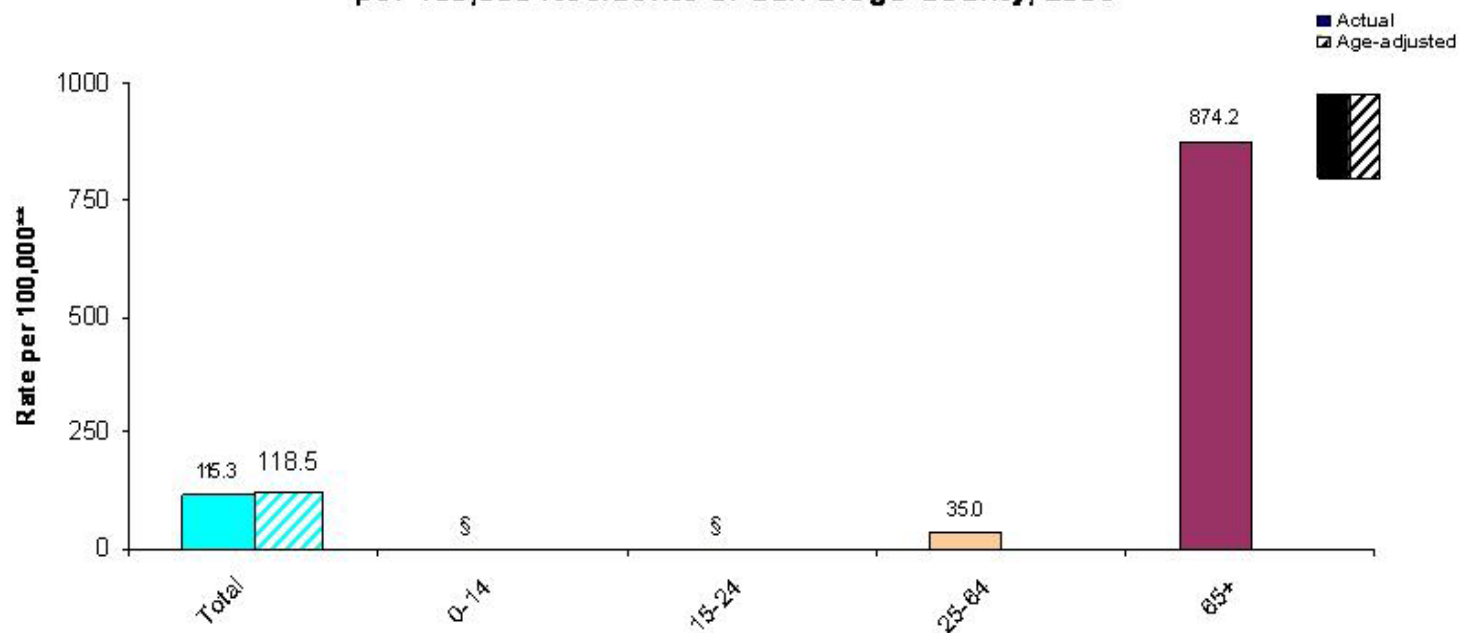
# National Disparities



**In 2000, the age-adjusted death rate from CHD was highest for blacks, followed by whites, and higher for men than women.**

# Local Statistics

**Coronary Heart Disease Death\* Rates\*\* by Age Group  
per 100,000 Residents of San Diego County, 2006**



\*Coronary Heart Disease death refers to (underlying cause of death) ICD-10 codes I21, I20-I25

\*\*County actual rates are per 100,000 individuals. County age-adjusted rates per 100,000 2000 US standard population.

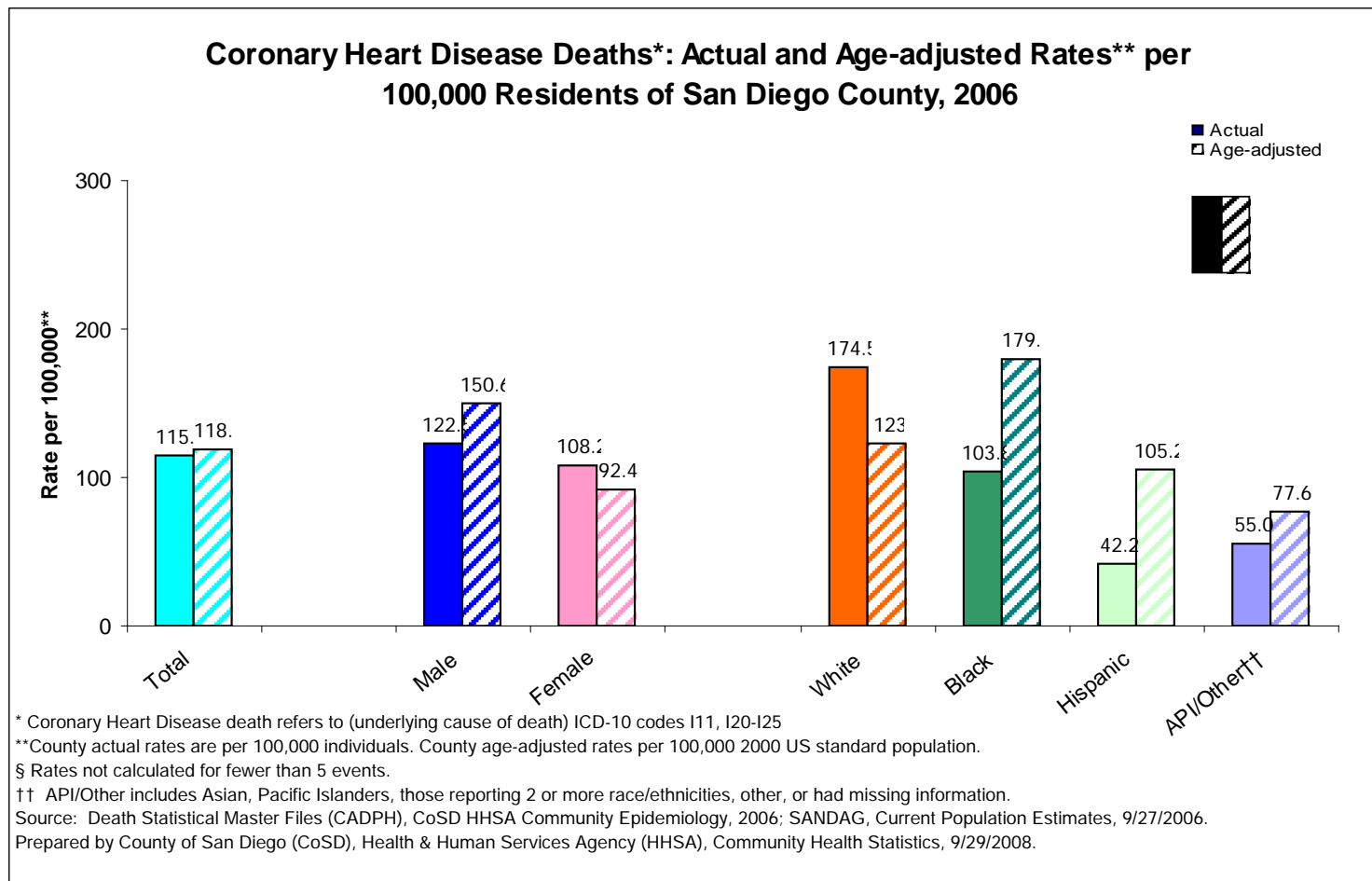
§ Rates not calculated for fewer than 5 events.

† APV Other includes Asian, Pacific Islanders, those reporting 2 or more race/ethnicities, other, or had missing information.

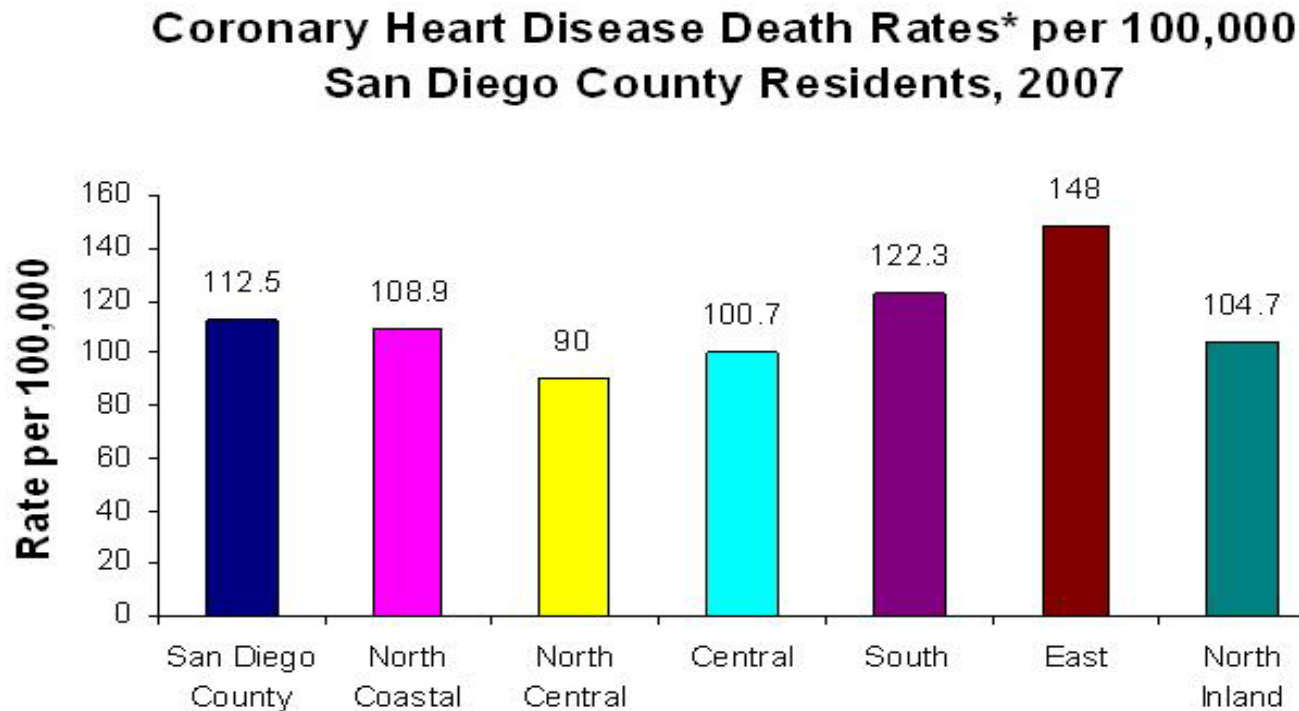
Source: Death Statistical Master Files (CADPH), CoSD HHSA Community Epidemiology, 2006; SANDAG, Current Population Estimates, 9/27/2006.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/29/2008.

# Local Statistics and Disparities



# Local Statistics and Disparities



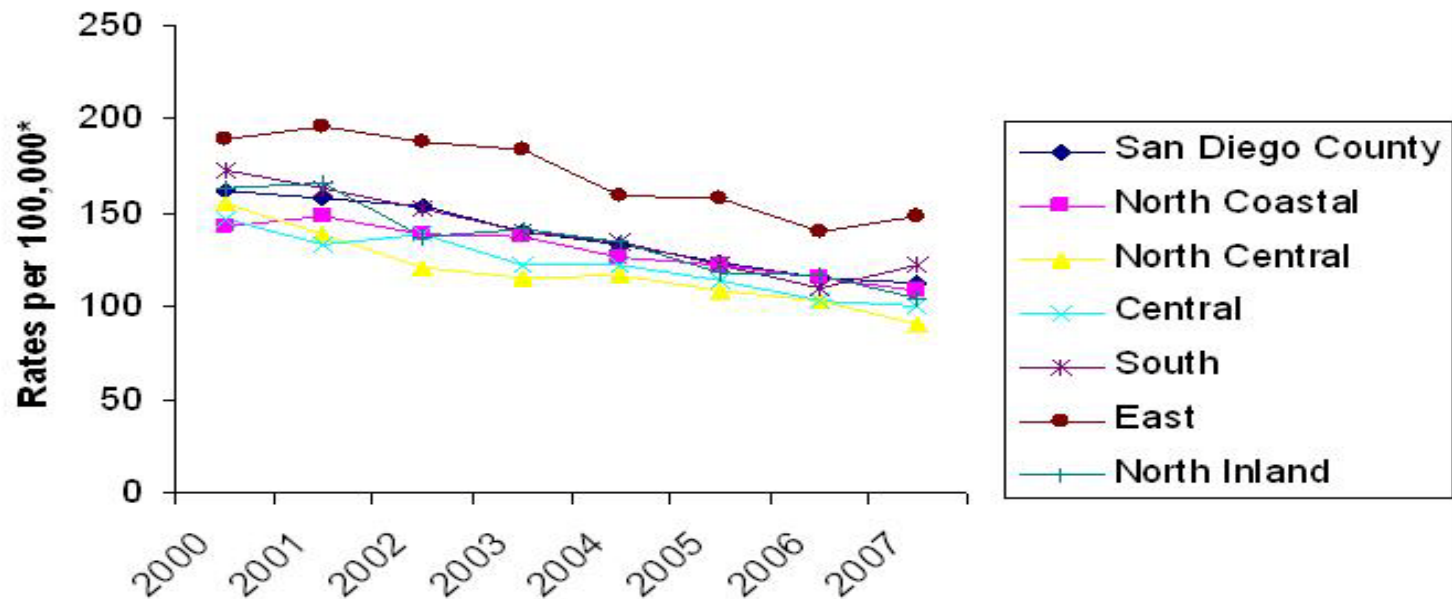
\*County actual rates are per 100,000 individuals.

Source: San Diego County Community Profiles, CoSD HHSA Community Epidemiology, 2009.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 4/21/2010.

# Local Statistics and Disparities

**Coronary Heart Disease Death Rates\* per 100,000  
San Diego County Residents, 2000-2007**



\*County actual rates are per 100,000 individuals.

Source: San Diego County Community Profiles, CoSD HHSA Community Epidemiology, 2009.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 4/28/2010.

# Disease Prevention

- Avoid smoking
- Be physically active
- Control weight
- Eat healthy foods
- Avoid excessive alcohol consumption
- See a doctor regularly to:
  - Monitor cholesterol level
  - Check blood pressure
  - Control diabetes





# Know the 5 Major Symptoms of a Heart Attack

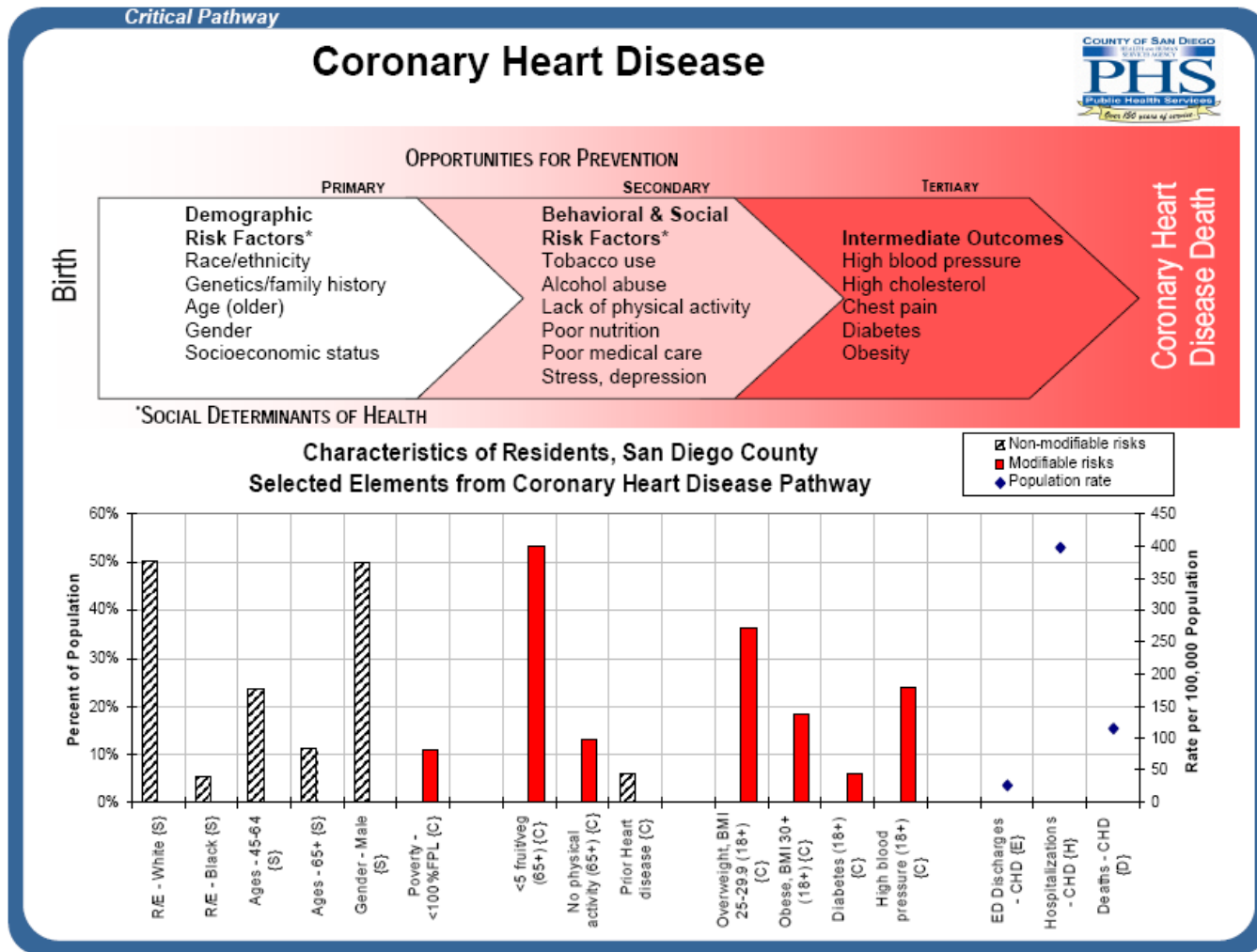
1. Pain or discomfort in the jaw, neck, or back
2. Feeling weak, light-headed, or faint
3. Chest pain or discomfort
4. Pain or discomfort in arms or shoulder
5. Shortness of breath

If you think that you or someone you know is having a heart attack, call 9–1–1 immediately.



**DIAL 9-1-1**

# Critical Pathway for Coronary Heart Disease



04/09 County of San Diego ■ Health and Human Services Agency ■ Public Health Services ■ Community Health Statistics Unit ■ www.SDHealthStatistics.com ■ (619)285-6479

# Contact Us

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